

What is claimed is:

1. A medical manipulator comprising:
 - a working unit that performs operations;
 - an operating unit that generates instructions;
 - a drive unit that drives the working unit on the basis of instructions given thereto by the operating unit;
 - a power transmission mechanism for transmitting driving force of the drive unit to the working unit; and
 - a control unit for controlling the power transmission mechanism on the basis of instructions given thereto by the operating unit;

wherein the power transmission mechanism includes a first power transmission unit interlocked with the drive unit, and a second power transmission unit interlocked with the working unit and capable of being detachably connected to the first power transmission unit, and

a back drive torque of the first power transmission unit is larger than a back drive torque of the second power transmission unit.

2. The medical manipulator according to claim 1, wherein the control unit is capable of executing operations specified by a control program for setting the first power transmission unit in a predetermined initial positional state at the normal completion of an operation.

3. The medical manipulator according to claim 2, wherein the control program waits in a waiting state where the control unit is initialized by connecting the medical manipulator to a power source for an operation start instruction specifying an operation for setting the operating unit in an operational state, a return-to-origin instruction specifying an operation for setting the first power transmission unit in the predetermined initial positional state or a shutdown instruction specifying an operation for disconnecting the medical manipulator from the power source, and the control program makes the shutdown instruction effective only when it is confirmed that the first power

transmission unit has been set in the predetermined initial positional state.

4. The medical manipulator according to claim 1 further comprising an initialization detecting means capable of being connected to the first power transmission unit when the first power transmission unit is disconnected from the second power transmission unit and of detecting components of the first power transmission unit set at predetermined joining positions, respectively.

5. The medical manipulator according to claim 1, wherein the back drive torque of the first power transmission unit has a strength more than 0.05N•m when the first and the second power transmission unit are connected together.

6. The medical manipulator according to claim 1, wherein the working unit and the second power transmission unit are integrated in an assembly, the operating unit and the first power transmission unit are integrated in an assembly, and the assembly of the working unit and the second power transmission unit, and the assembly of the operating unit and the first power transmission unit can detachably connected together.

7. The medical manipulator according to claim 1, wherein the working unit and the second power transmission unit are integrated in an assembly; and the assembly of the working unit and the second power transmission unit, the first power transmission unit, and the operating unit can detachably be connected together.